POSITION DUTY STATEMENT

PM-0924 (REV 7/2014)

CLASSIFICATION TITLE	OFFICE/BRANCH/SECTION	
Systems Software Specialist II (Technical)	D20/Information Technology/OSS/System Administration	
WORKING TITLE	POSITION NUMBER	EFFECTIVE DATE
System Administrator		11/25/2015

As a valued member of the Caltrans team, you make it possible for the Department to provide a safe, sustainable, integrated, and efficient transportation system to enhance California's economy and livability. Caltrans is a performance-driven, transparent, and accountable organization that values its people, resources and partners, and meets new challenges through leadership, innovation and teamwork.

GENERAL STATEMENT:

Under the general supervision of a System Software Specialist II (Supervisory), the incumbent independently acts as an expert level technical specialist to assure the successful development, implementation and maintenance of UNIX and LINUX servers that support Caltrans various complex mission critical applications. The incumbent shall display a thorough and comprehensive working knowledge of System Administration practices, network configurations and data communication protocol, knowledge of virtualization as well as SAN/NAS storage technology, and insuring system redundancy is maintained as follows:

TYPICAL DUTIES:

Percentage Essential (E)/Marginal (M)[1]		Job Description
40%	E	Administrator supporting local and statewide UNIX and LINUX servers. Will provide technical consultation, support and expertise in administering all functions of hardware and software installed on UNIX and LINUX platforms. Will work closely with other technical staff including Database Administrators and Application Developers to assist in installations, monitoring and tuning of server, and troubleshooting any server problems.
30%	E	Responsibilities include diagnose and remediate system problems that negatively impact the availability of Caltrans mission critical application. Incumbent will install and configure new systems, perform upgrades and patches to the operating system and update firmware, replace failing components or open services request with the vendor to replace components, monitor bulletins, alerts and new product features. The incumbent is also responsible for making sure the system is secure.
15%	E	The incumbent makes IT system virtualization/consolidation recommendations, designs and implements the solutions by working with IT Staff, and the business units. The incumbent provides technical leadership to business partners, by ensuring IT recommendations or solutions align with current standards for UNIX server environments, future state architecture and Caltrans strategic goals.
15%	M	Work cooperatively with client users, management and vendors in the further development and consultation on UNIX and LINUX technical architecture and application software issues.

[1]ESSENTIAL FUNCTIONS are the core duties of the position that cannot be reassigned.
 MARGINAL FUNCTIONS are the minor tasks of the position that can be assigned to others.

SUPERVISION OR GUIDANCE EXERCISED OVER OTHERS

The incumbent has no direct supervisory responsibilities. However, this position may take on lead roles in a project team environment over permanent and/or contractor personnel assigned to the project under his/her area.

KNOWLEDGE, ABILITIES, AND ANALYTICAL REQUIREMENTS

Knowledge of:

The principles and practices of UNIX and LINUX system hardware and software. The incumbent must be thoroughly familiar with Wide Area Networks running in a complex multi-protocol environment, as well as be knowledgeable about various UNIX and LINUX platforms and their hardware architecture, operation and management. The incumbent must also be knowledgeable of UNIX and LINUX networking and network management relevant to client server environment,

Internet and other networking hardware/software. The incumbent must also be fully knowledgeable of good practices of data processing system design, UNIX and LINUX shell programming and documentation. The incumbent must be capable of studying work processes for the design of new systems and the revision of existing data processing systems. Also required is a thorough understanding of the principles of task management; operational guidelines; and, preparation and maintenance of program and system documentation and user manuals and guides; and of the Structured Development Process.

Ability to:

Write clearly and concisely, document system procedures and flow; analyze data and situations; reason logically and creatively, identify problems, draw valid conclusions, and develop effective solutions; write complex programs and develop detailed program specifications; apply creative thinking in the design and development of processing data with electronic computers; establish and maintain cooperative working relationships with those contacted in the course of the work; speak and write effectively; prepare effective reports; and provide technical support to other incumbents.

Analytical Skills:

The incumbent must have a level of technical understanding to take advantage of Electronic Data Processing disciplines, from solution conceptualization through implementation. In addition, the incumbent must have the skills necessary to address project and resource management, and the planning, evaluating, scheduling, directing and controlling of Information Technology (IT) project teams.

RESPONSIBILITY FOR DECISIONS AND CONSEQUENCES OF ERROR

The incumbent is responsible for decisions, actions, and consequences related to the deployment of system applications, the failure of which would result in the loss of Departmental funds and customer trust.

PUBLIC AND INTERNAL CONTACTS

The incumbent works closely with client personnel outside of the Information Technology organization. This will include all levels of management and staff within Caltrans and those of external agencies, private companies and consultants. In performing the responsibilities of this position, the incumbent may initiate contact with other departments, governmental agencies or private companies concerning EDP technologies and methodologies.

PHYSICAL, MENTAL, AND EMOTIONAL REQUIREMENTS

PHYSICAL
• Incumbent may be required to travel in state, but the travel it is not very frequen
• May be required to sit for long periods of time using a keyboard and video display terminal
• May be required to work in an environment where temperatures fluctuate, that is noisy, poorly lighted or cramped
• Requires occasional moving of objects, bending, stooping and kneeling

EMOTIONAL
• Most of the jobs in the Division require interaction with many people. It is important that incumbents work with others in a cooperative manner
• May have to work in highly flexible situations when system failures occur and immediate resumption of services is paramount
• Ability to resolve emotionally charged issues reasonably and diplomatically.
• Must deal effectively with pressure, maintain focus, and intensity yet remain optimistic and persistent, even under adversity
• Considering and responding appropriately to the needs, feelings, and capabilities of different people in different situations; is tactful and treats others with respect
• Is open to change and new information; adapts behavior and work methods in response to new information, changing conditions, or unexpected obstacles
• Behaves in a fair and ethical manner toward others and demonstrates a sense of responsibility and commitment to public service
• Influences others toward a spirit of service and meaningful contributions to mission accomplished
• The workload is subject to frequent, substantial, and unexpected changes within a few months
• Values cultural diversity and other individual differences in the workforce
• Ensures that the organization builds on these differences and that incumbents are treated in a fair and equitable manner

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MENTAL
• Must have the ability to multi-task, adapt to changes in priorities, and complete tasks or projects with short notice
• Must be able to concentrate and to focus for long periods of time in order to review and create programs, documentation and/or reports
• Must be able to organize and prioritize large volumes of varied documents

WORK ENVIRONMENT
• While at their base of operation, incumbents will work in a climate-controlled office under artificial light. However, due to periodic problems with the heating and air conditioning, the building temperature may fluctuate.
• Incumbent will work in workstations within shared cubicles. Working hours will be set between 6:30 a.m. and 6:30 p.m.
• Overtime may be required, and vacations may be restricted, in order to meet project deadlines and operational requirements.
• While we expect and promote internal transfers within the Division, for personal and professional development, we encourage staff to stay in their positions long enough to develop some expertise before transferring.
• Scheduling is often difficult because of stringent timing limitations and the need to coordinate the organization's work with other organizations committed to the same production requirement.

I have read, understand and can perform the duties listed above. (If you believe you may require reasonable accommodation, please discuss this with your hiring supervisor. If you are unsure whether you require reasonable accommodation, inform the hiring supervisor who will discuss your concerns with the Reasonable Accommodation Coordinator.)

EMPLOYEE (Print)

EMPLOYEE (Signature)	DATE

I have discussed the duties with, and provided a copy of this duty statement to the employee named above.

SUPERVISOR (Print)

SUPERVISOR (Signature)	DATE